

important papers he contributed to astronomy, meteorology, and sanitary science. They evince his great mental activity, and the earnestness with which he pursued his investigations. Indeed, his love of knowledge for its own sake was essentially the delight and solace of his life, and even in old age and sickness it seemed to remain as bright and unwearied as ever.

Up to the last, when discharging his editorial duties for the Manchester Philosophical Society, with which he was in a special sense identified, it was his habit not merely to read the papers which passed through his hands, but to digest them and to propound questions to the writers on the most varied subjects not in his editorial capacity, but in that of a student. This extraordinarily healthy, yet at the same time quiet, activity of a mind which never seemed to regard anything as not worth knowing, is abundantly exemplified in the record of his life. If he has not established any great generalisation or law as a lasting monument of his labours, he has at least introduced some order, directed attention to some far-reaching truths, and illuminated many obscure paths for future investigators.

He was elected a Fellow of this Society January 9, 1857.

WILLIAM ROBERT STUART CALLCOTT was born on August 8, 1851, at The Mall, Kensington Gravel Pits, where his family had lived for many generations.

He was the youngest son of the late William Hutchins Callcott, the well-known musical composer, and grandson of Dr. Callcott, whose glees and other compositions have a world-wide reputation. He was also a grand-nephew of the great landscape painter and Royal Academician, Sir Augustus W. Callcott.

From his early boyhood Robert Callcott exhibited great genius, especially for music, and had all the advantages which his distinguished connection both with painting and music procured for him. He was educated at a private school at Hurstmonceux and at The Philberds, near Maidenhead, a spot to which in after years he loved to retire for rest and quiet, and where he died, after only a few days' illness, on April 7, 1886.

On leaving school he evinced a great taste for Church music. His extempore organ playing attracted the attention of the late Henry Smart, who took great interest in him and often entrusted his young *protégé* with the accompaniment of the services at old St. Pancras Church. The pupil soon became devotedly attached to the master, and the death of the latter was a great blow to him. The few years which elapsed between this event and his own death were occupied in teaching and in filling various positions as an organist, notably at Christ Church, Kensington. He possessed great aptitude for choir-training, and was especially successful in cultivating boys' voices, often out of the crudest material. At the time of his death he was engaged also in

editing and arranging, for Dr. Stainer, a new chant-book for use in St. Paul's Cathedral.

Towards the close of his short life Robert Callcott became deeply interested in Astronomy. Next to music it was his chief study, and his great delight was to deliver popular lectures on the subject. Almost his last act was to purchase the Observatory of the late Canon Chevallier, but he did not live to see it removed from the rectory at Heighington.

He was buried in the picturesque little churchyard of Bray, near Maidenhead.

He was elected a Fellow of this Society June 13, 1884.

JOHN BENJAMIN DANCER was born in London on October 8, 1812. In 1818 his father, Mr. Josiah Dancer, removed to Liverpool, where he carried on the business of an optician and philosophical instrument maker. His son very early in life evinced a strong taste for mechanical and scientific pursuits, and when the father died, in 1835, he was able to carry on the business.

After a few years Mr. Dancer removed to Manchester, where he became well known through his numerous inventions and improvements of philosophical instruments. Among these may be mentioned photographic slides for the magic lantern, which were first suggested by him; the introduction of earthenware porous jars in voltaic batteries, the preparation of microphotographs, improvements in the stereoscope, and the production of a new thermometer described by Dr. Joule as "the first made in England with any pretension to accuracy."

With regard to Mr. Dancer's connection with the microscope, it would be difficult to overestimate the stimulus he gave to microscopy in Manchester by bringing out successively several forms of instruments as excellent in their mechanical and optical arrangements as they were moderate in price.

Some few years ago his sight began to fail, and in a short time he became totally blind, and with this affliction his business declined; and it is sad to record that one who had rendered such valuable service to science should have ended his days, on November 24, 1887, in very straitened circumstances.

Mr. Dancer's active mind never lost its interest in the studies and discoveries of his earlier years. By his numerous friends his society was to the last highly appreciated, and his modest and kindly disposition greatly enhanced the pleasure and advantage of his conversation. His simple-minded devotion to every branch of physics was not less remarkable than his unfailing industry, and the inventive genius by which it was directed to results of no ordinary importance to the mechanician and the lover of natural science.

He was elected a Fellow of this Society March 9, 1855.

THOMAS GASKIN was born at Penrith, in Cumberland, on May 12, 1810. He was educated at Sedbergh School, and in

P